

IN THE SPECIFICATION

Please replace the paragraph beginning at line 5 on Page 13 with the following paragraph:

-- Figure 4 shows a block diagram illustrating the principle of the common-path optic. Radiation, at the selected wavelength(s), is emitted by the illumination source(s) 11 of the imaging sensor [[2, 6]]. This radiation is directed by a so-called common-path optic 7 (described in more detail in relation to Figs. 4, 5 and 6) to exit through a sensor window. The emitted radiation strikes the target 4 in the vicinity of the window and radiation reflected by the target is directed through the same area 17 on the same window through which the illumination radiation passes. The common-path optic 7 then transmits the reflected radiation to focusing optics 8 which form an image of the target on the detector(s) 9 of the imaging sensor. --

Please replace the paragraph beginning at line 7 on Page 14 with the following paragraph:

-- Figure 8 shows an electrical block diagram for an example embodiment of the image processing components of the sensor. Since, where objects are viewed in different media, different rates of absorption exist, the illumination levels at each wavelength or waveband are different. So as to mitigate the effects of this, a video amplifier 14 and other amplifiers 14' and 14'' with a non-linear response

may be connected to the detector 9 to compress the dynamic range in the output signal. For example, a logarithmic response may be applied. The response characteristics of the amplifier are preferably adjustable; for example, the slope would be adjustable if a logarithmic response were applied. The resulting processed image can then be further transmitted, recorded and/or displayed. The non-linear amplifier may be integral with the image sensor, or may be located in a separate unit outside the image sensor housing. --

Please replace the text of the Abstract on Page 24 with the following:

-- The present invention relates to an in-vessel or down-hole optical imaging sensor or system for operating in structures which may contain media with different spectral transmission characteristics. The imaging sensor of the present invention selectively emits and/or detects two or more independently controllable wavelengths or wavebands. The imaging sensor comprises illuminating means an illuminator for emitting radiation of a specified wavelength or waveband through a medium to a target, detector means at least one detector for detecting the radiation deflected by said target and amplifier means at least one amplifier for providing non-linear amplification of the detector [[means]] output. The sensor of the present invention may also comprise a sensor window and optical means for directing the radiation through an area of the sensor window in a first direction and optical means for receiving the radiation reflected from the target through the same area of the sensor

~~window in a second direction. The optical means then transmit the reflected radiation to focusing optics which form an image of the target on the detector.~~